

FIG. 1

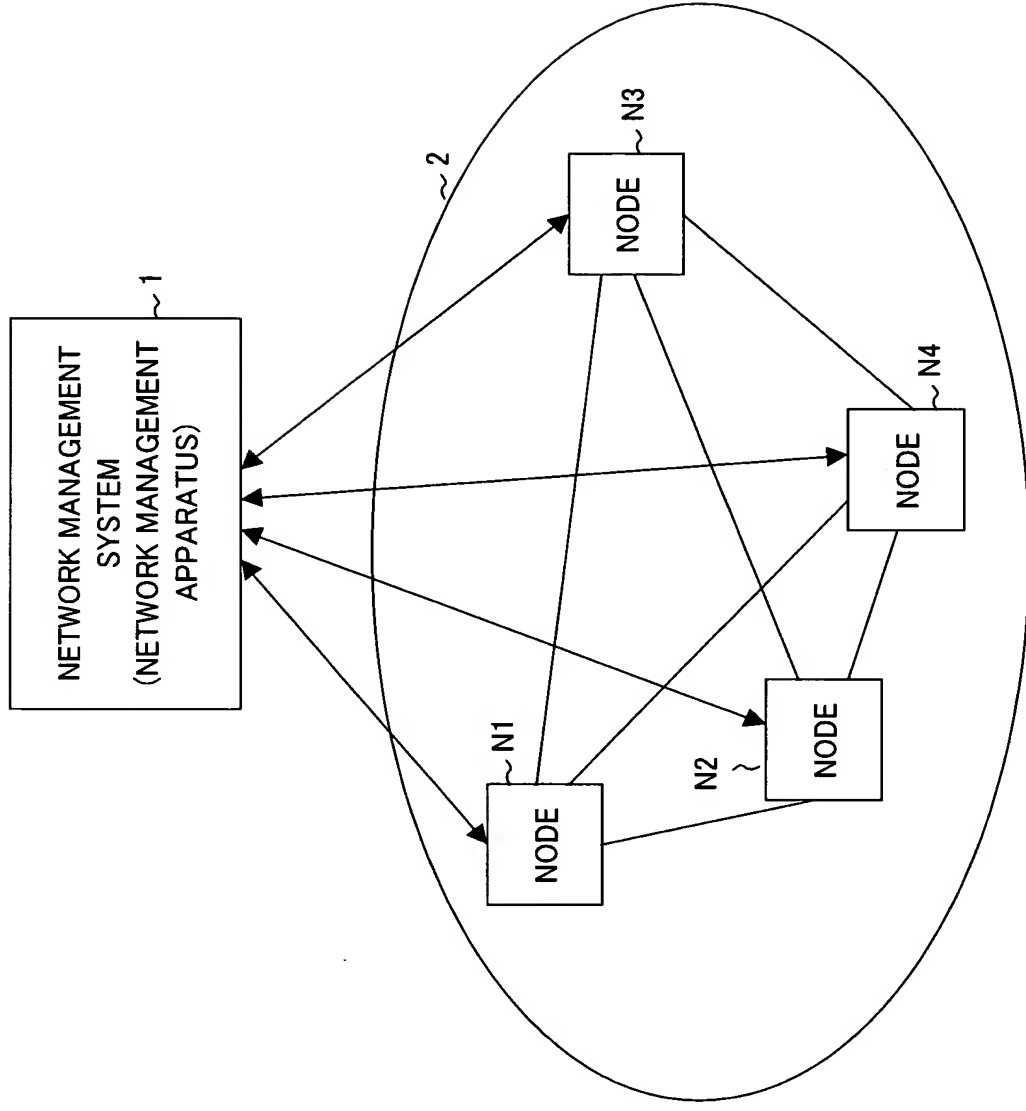


FIG. 2

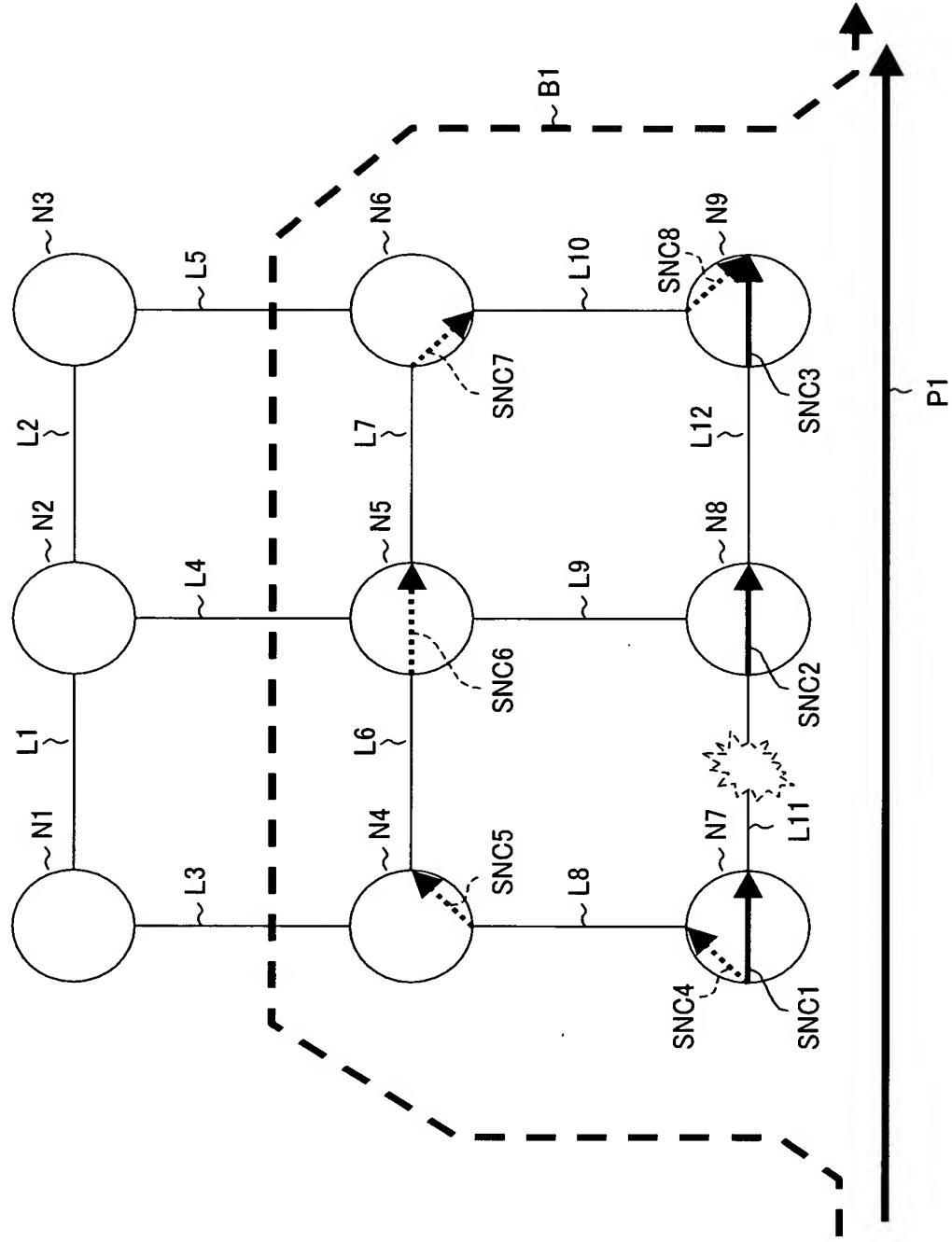


FIG. 3

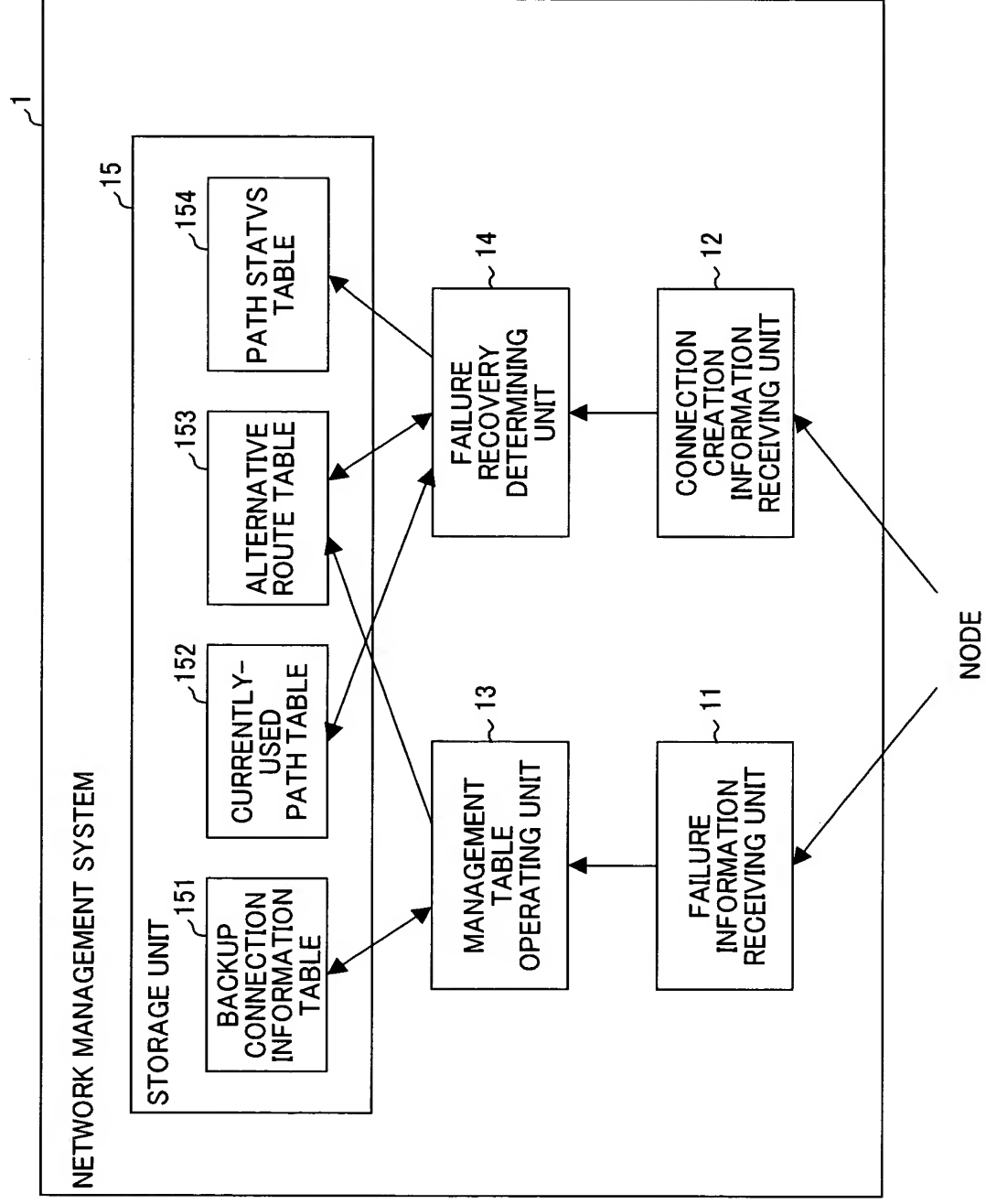


FIG. 4**BACKUP CONNECTION
INFORMATION TABLE**

CURRENTLY-USED PATH	BACKUP CONNECTION INFORMATION
PATH P1	SNC4, SNC5, SNC6, SNC7, SNC8
PATH P2	...
⋮	⋮

FIG. 5**CURRENTLY-USED PATH TABLE**

BACKUP CONNECTION INFORMATION	CURRENTLY-USED PATH
SNC4	PATH P1
SNC5	PATH P1, PATH P2, PATH P3
SNC6	PATH P1, PATH P2
⋮	⋮

FIG. 6

ALTERNATIVE ROUTE
MANAGEMENT TABLE

CURRENTLY -USED PATH	BACKUP CONNECTION INFORMATION	BACKUP CONNECTION INFORMATION CREATION FLAG	CURRENTLY -USED PATH RECOVERY FLAG
PATH P1	SNC4	0	0
	SNC5	1	
	SNC6	1	
	SNC7	0	
	SNC8	0	
⋮	⋮	⋮	⋮

FIG. 7

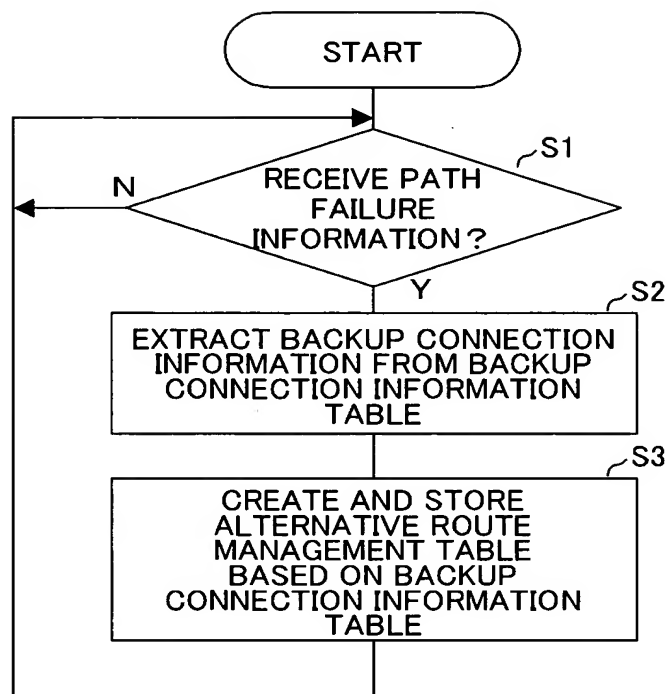


FIG. 8

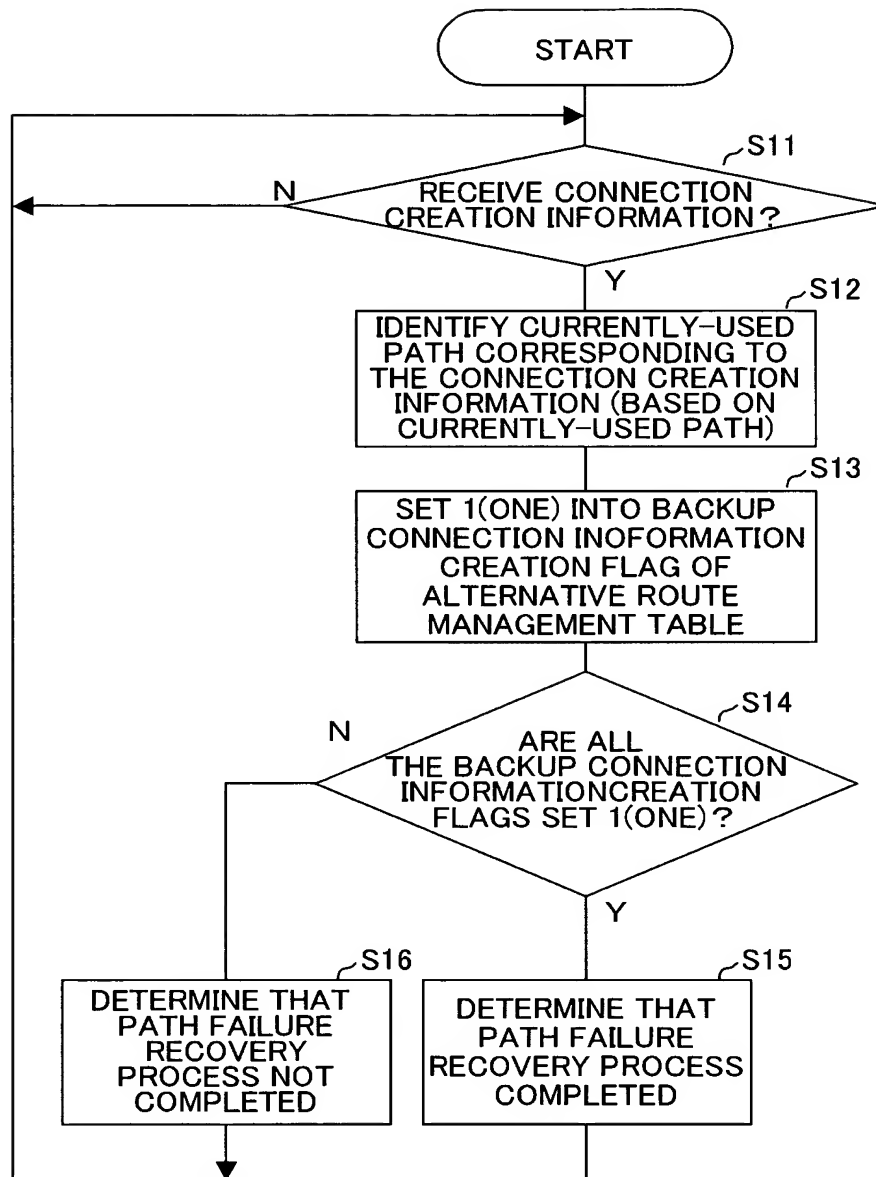


FIG. 9

**CREATION CONNECTION
INFORMATION MANAGEMENT**

CREATION CONNECTION INFORMATION
SNC6
SNC5
• • •

FIG. 10

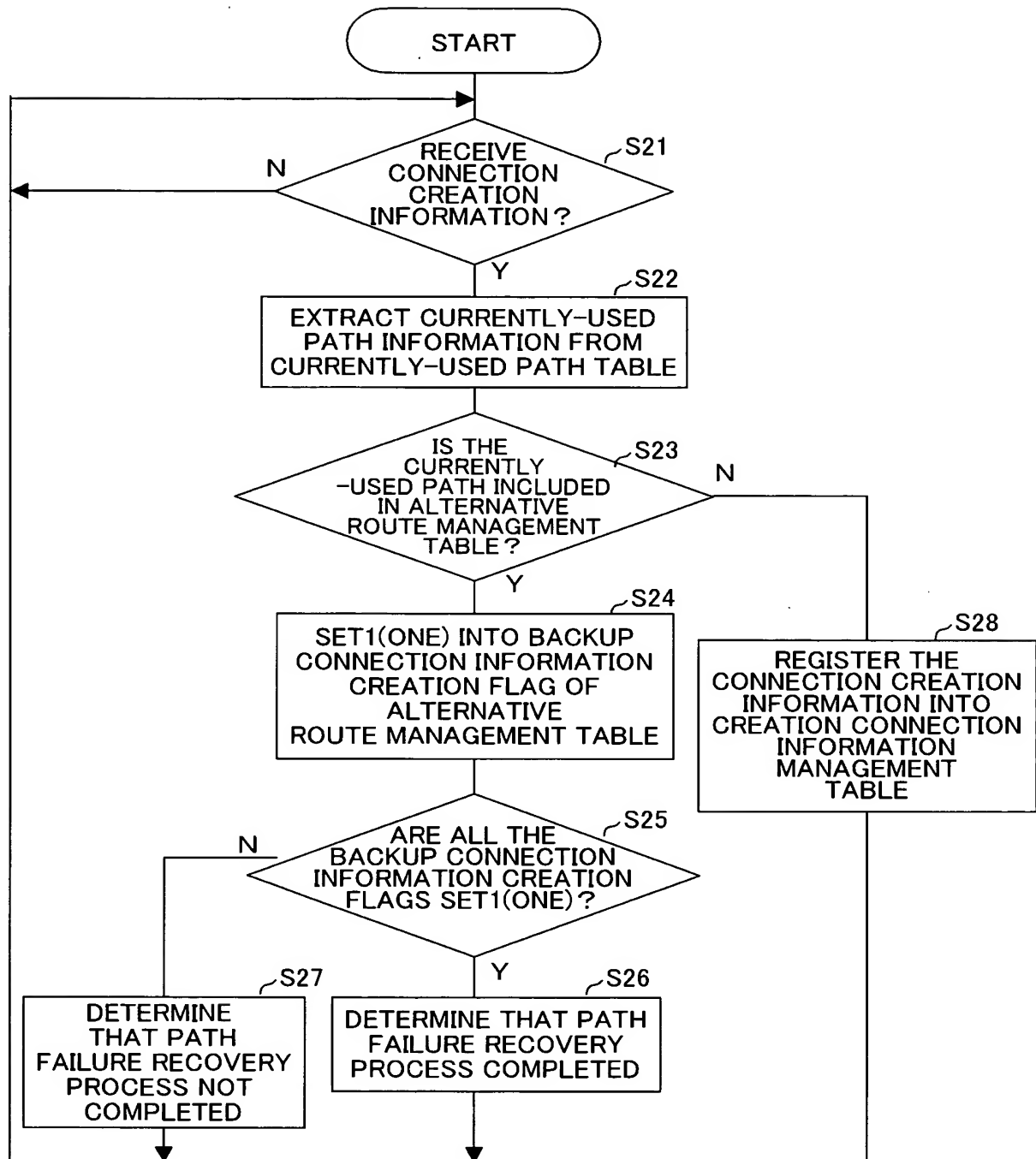


FIG. 11

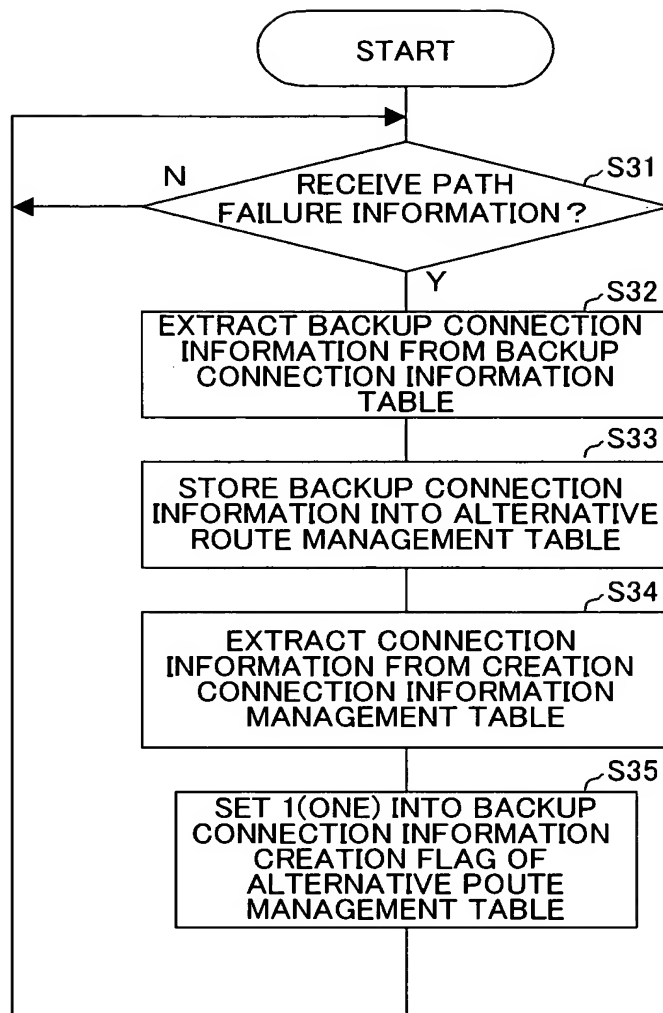


FIG. 12

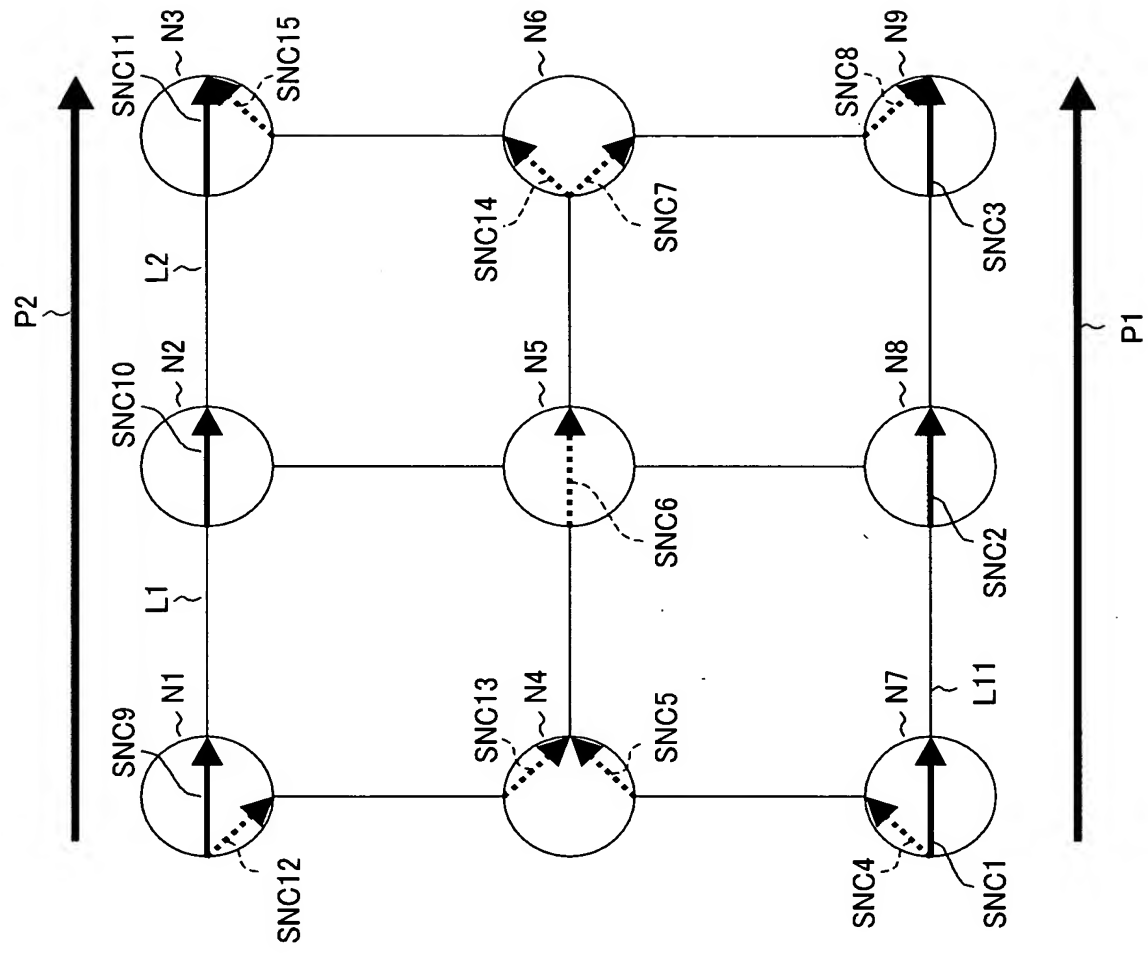


FIG. 13

**CURRENTLY-USED
PATH TABLE**

BACKUP CONNECTION INFORMATION	CURRENTLY-USED PATH
SNC4	PATH P1
SNC5	PATH P1
SNC6	PATH P1, PATH P2
SNC7	PATH P1
SNC8	PATH P1
SNC12	PATH P2
SNC13	PATH P2
SNC14	PATH P2
SNC15	PATH P2
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FIG. 14

ALTERNATIVE ROUTE MANAGEMENT

CURRENTLY -USED PATH	BACKUP CONNECTION INFORMATION	BACKUP CONNECTION INFORMATION CREATION FLAG	CURRENTLY -USED PATH RECOVERY FLAG
PATH P1	SNC4	0	0
	SNC5	1	
	SNC6	1	
	SNC7	0	
	SNC8	0	
PATH P2	SNC12	0	0
	SNC13	0	
	SNC6	1	
	SNC14	0	
	SNC15	0	
⋮	⋮	⋮	⋮

FIG. 15**OVERLAPPING CONNECTION
INFORMATION MANAGEMENT TABLE**

CONNECTION CREATION INFORMATION	NUMBER OF RELATED PATHS
SNC4	1
SNC5	1
SNC6	2
SNC7	1
SNC8	1
SNC12	1
SNC13	0
SNC14	0
SNC15	1
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FIG. 16

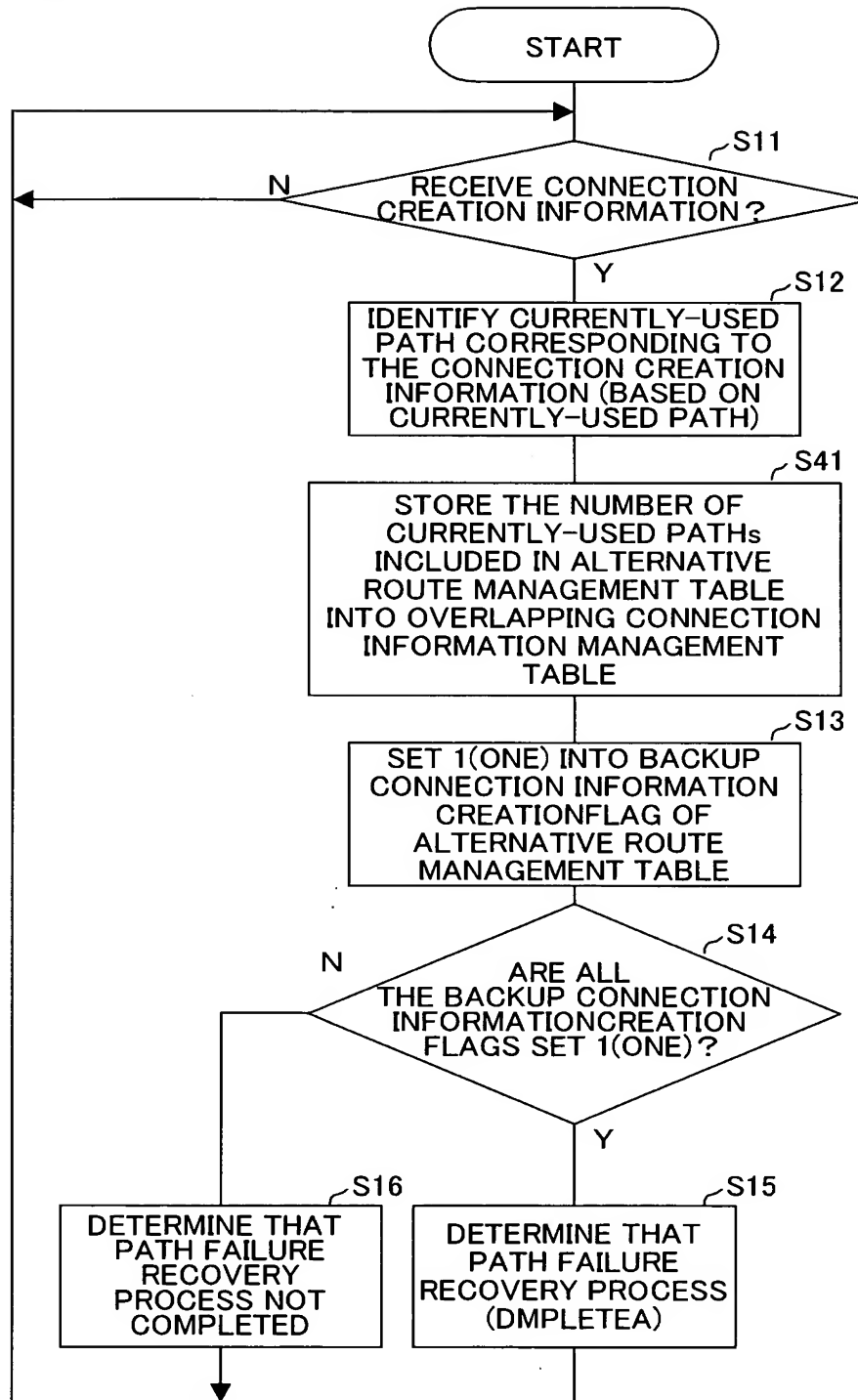


FIG. 17

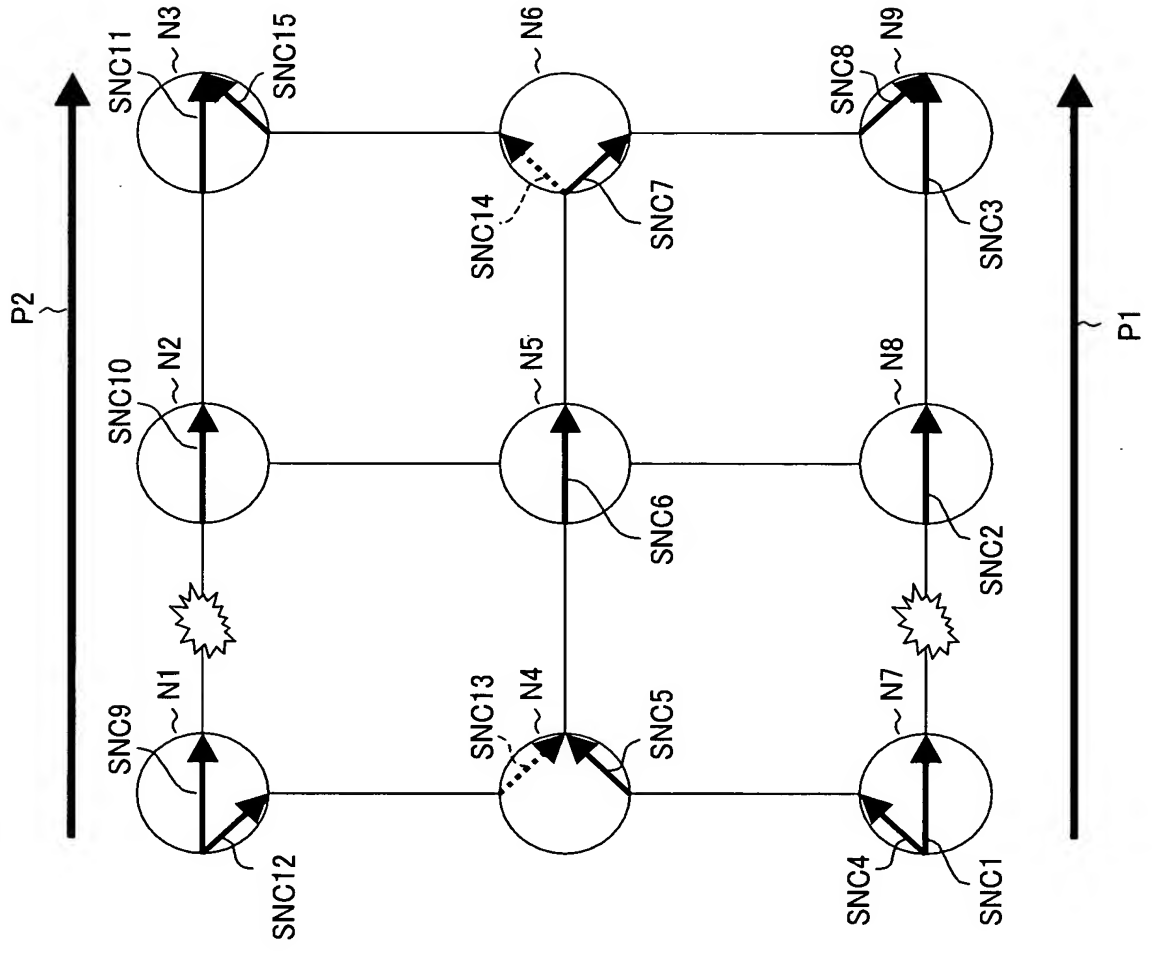


FIG. 18

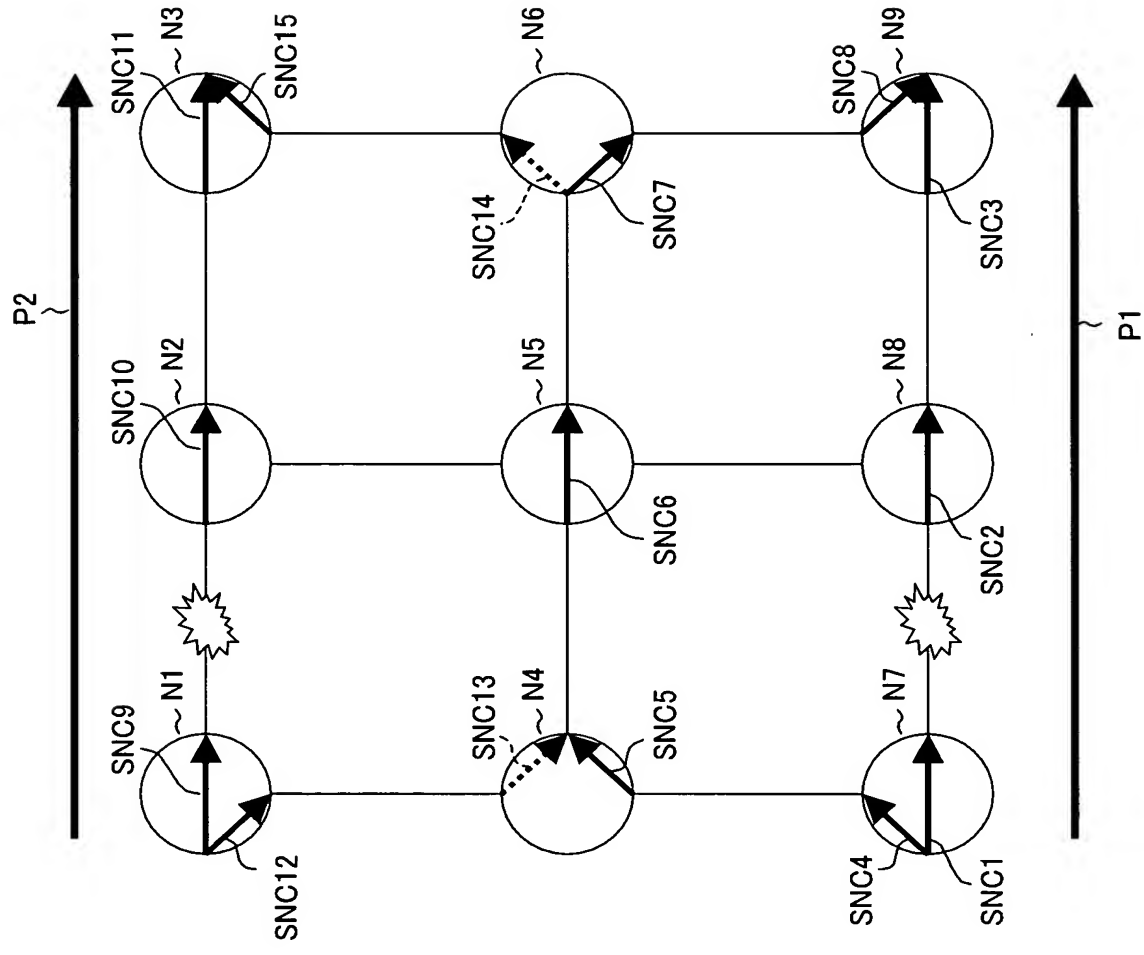


FIG. 19

**OVERLAPPING CONNECTION
MANAGEMENT TABLE**

CONNECTION CREATION INFORMATION	NUMBER OF RELATED PATHS
SNC4	1→0
SNC5	1→0
SNC6	2→1
SNC7	1→0
SNC8	1→0
SNC12	1
SNC13	0
SNC14	0
SNC15	1
· · ·	· · ·